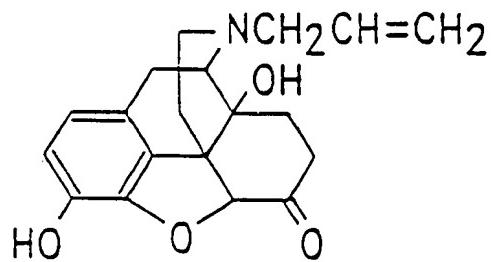
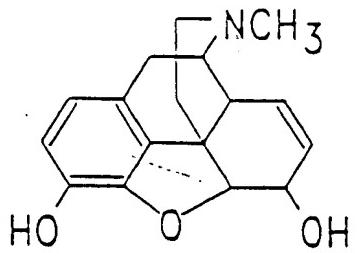
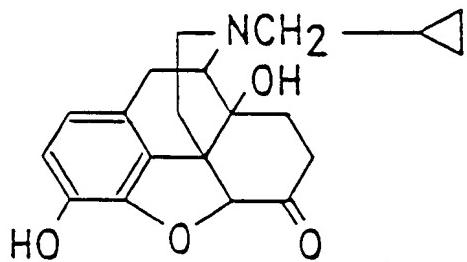


APPROVED BY	O.G. FIG.
CLASS	SUBCLASS
DRAFTSMAN	514 285

Morphine



Naloxone



Naltrexone (R=O)  
Nalmefene (R=CH<sub>2</sub>)

FIG. 1

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APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
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1. BSS  
2. Et 1mM  
3. Et 1μM  
4. Et 1nM  
5. Et 1uM  
6. BSS

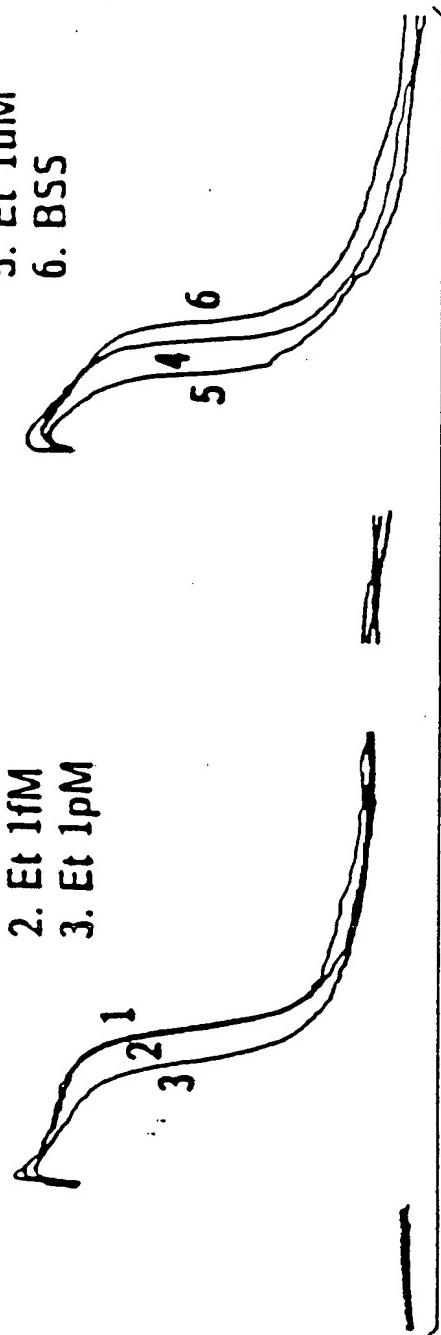


FIG. 2A

1. BSS  
2. Et 1mM  
3. NLX 10nM  
4. NLX + Et 1nM  
5. NLX + Et 1uM

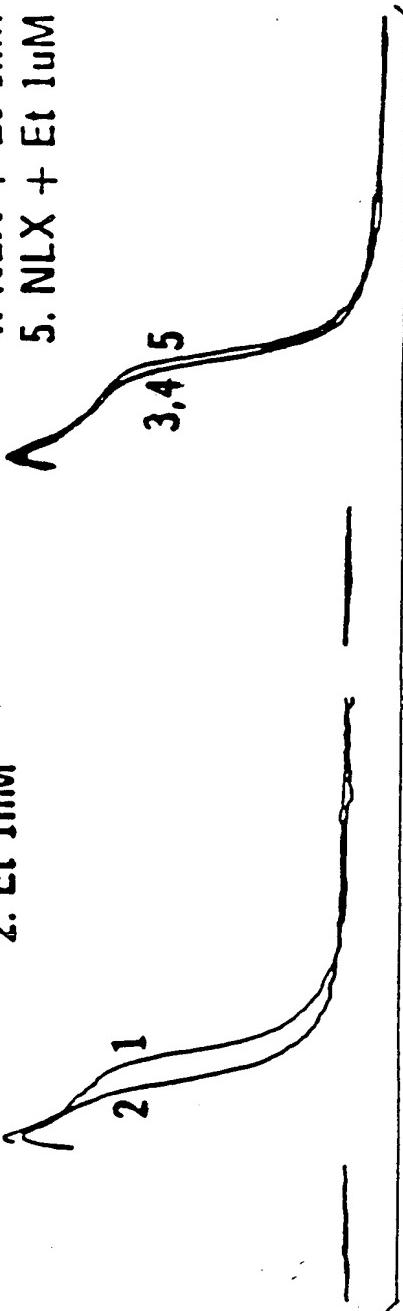


FIG. 2B

APPROVED	O.G. FIG.
BY	
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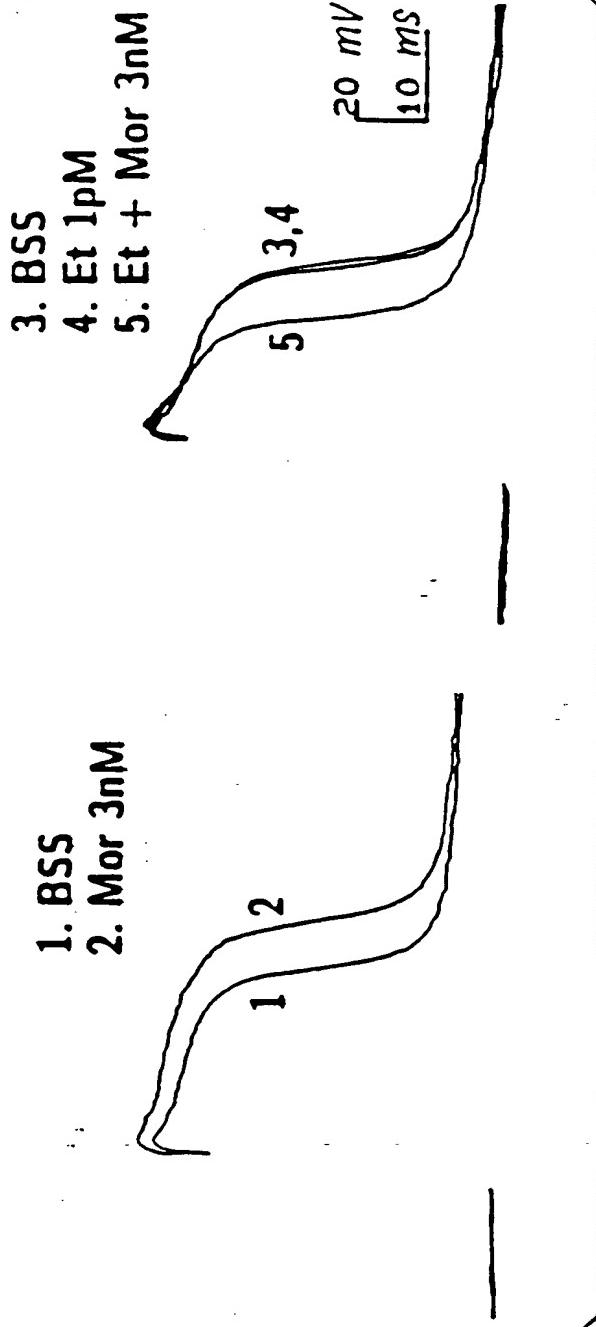


FIG. 2C

APPROVED	O.G. FIG.	—
BY	CLASS	SUBCLASS
DRAFTSMAN	514	285

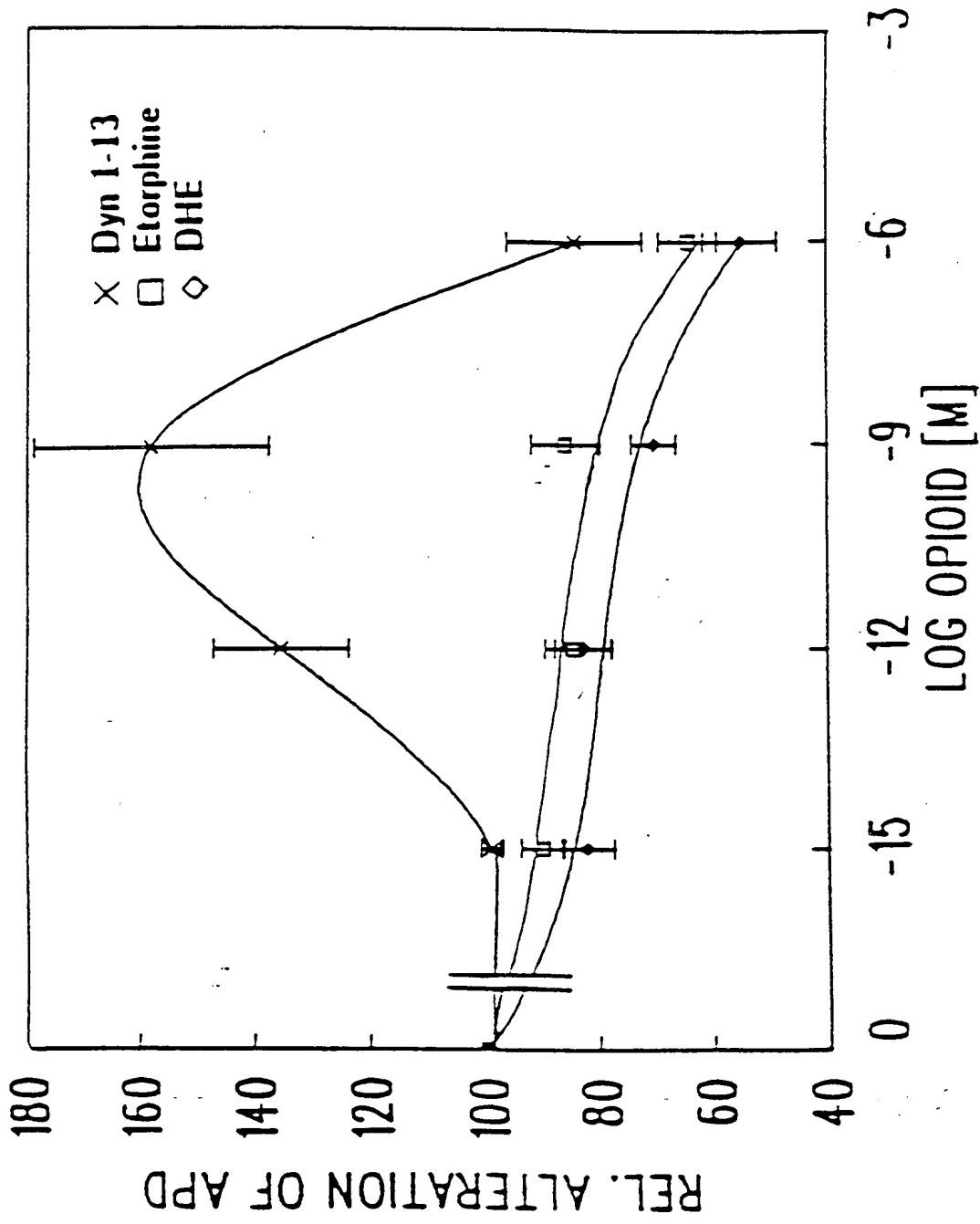


FIG. 3

APPROVED  
BY  
DRAFTSMAN O.G. FIG.  
CLASS 514 SUBCLASS 285

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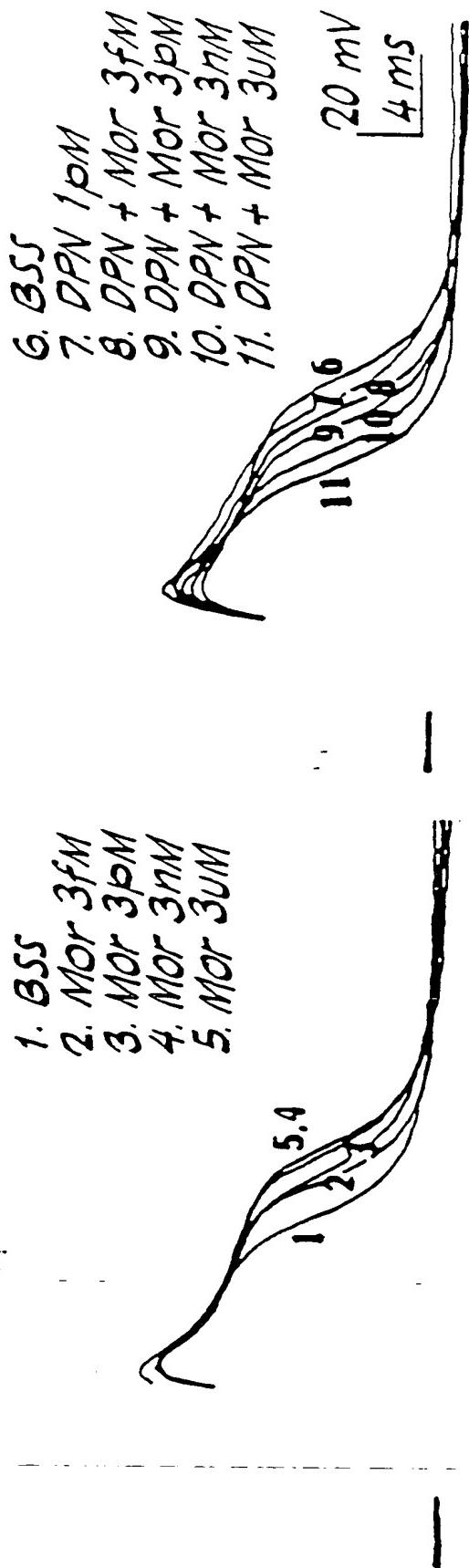


FIG. 4A

APPROVED	O.C. FIG.	—	
BY	CLASS	SUBCLASS	
DRAFTSMAN	514	285	

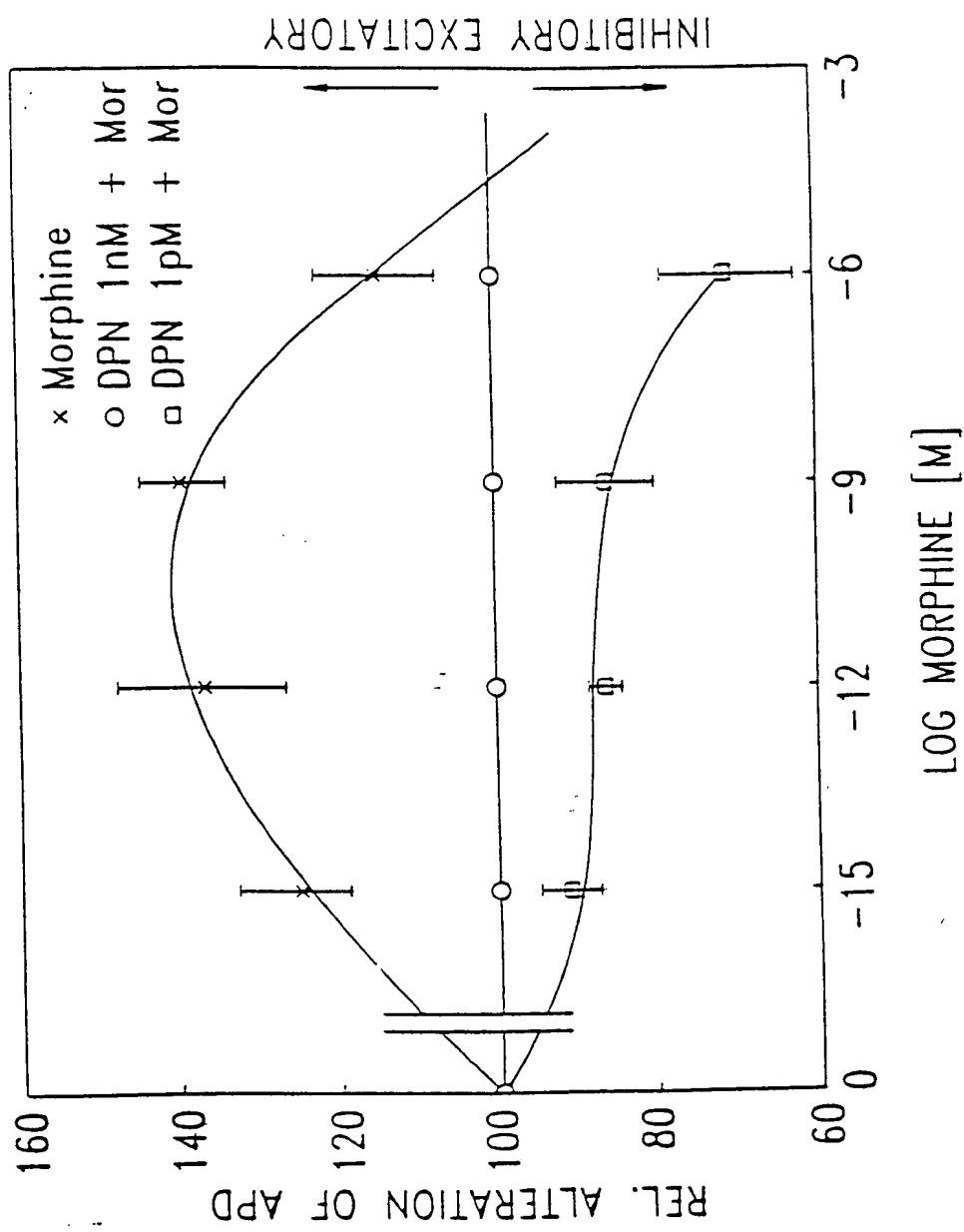


FIG. 4B.

APPROVED	O.G. FIG.	—
BY	CLASS	SUBCLASS
DRAFTSMAN	514	285

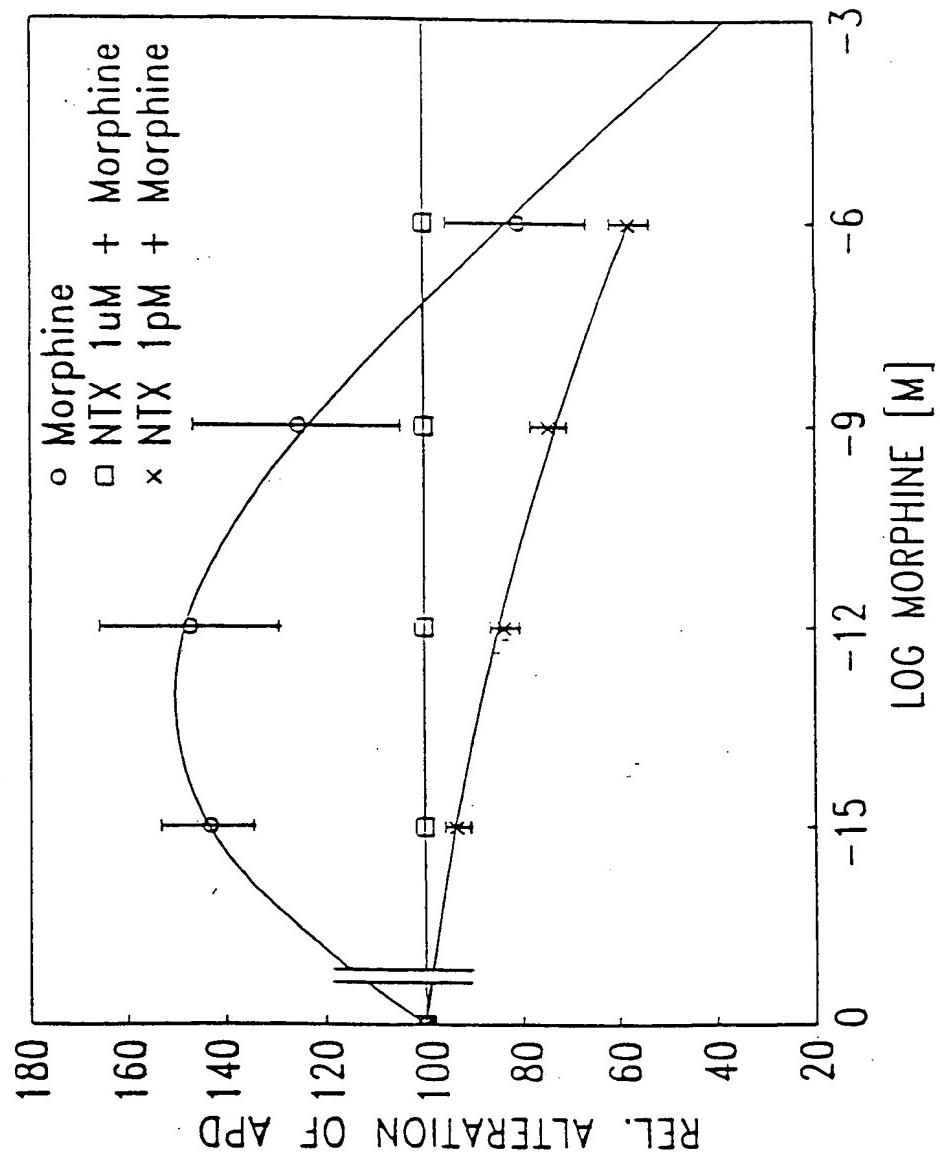


FIG. 5

APPROVED	O.G. FIG.
BY	
DRAFTSMAN	511 285
CLASS	SUBCLASS

Alteration of Action Potential Duration (APD)			
Acute Test	Naive DRG Neurons		Chronic Morphine - Treated Neurons (1uM; >1wk)
	Control BSS	BSS + Antag. at Excit.Op.Rec. (pM)	Chronic Co-treatment with Mor + Antag. at Excit. Op. Rec. (pM)
1 - 10 uM morphine	↓ (inhibitory) ("analgesia")	↑↑ ("tolerance")	↑
pM - nM morphine	↓ ("excitatory" anilinalgesia")	↑ (unmasking of inhibitory effects)	↑
~ fM morphine or dyn A-(1-13)	0	0 (excitatory supersensitivity)	0
nM naloxone	0	0 ("dependence") ("withdrawal effect")	0

FIG. 6

APPROVED BY	O.G. FIG.
DRAFTSMAN	514
	CLASS SUBCLASS 285

Co-Treatment with Low-dose Naltrexone Enhances  
Morphine's Antinociceptive Potency

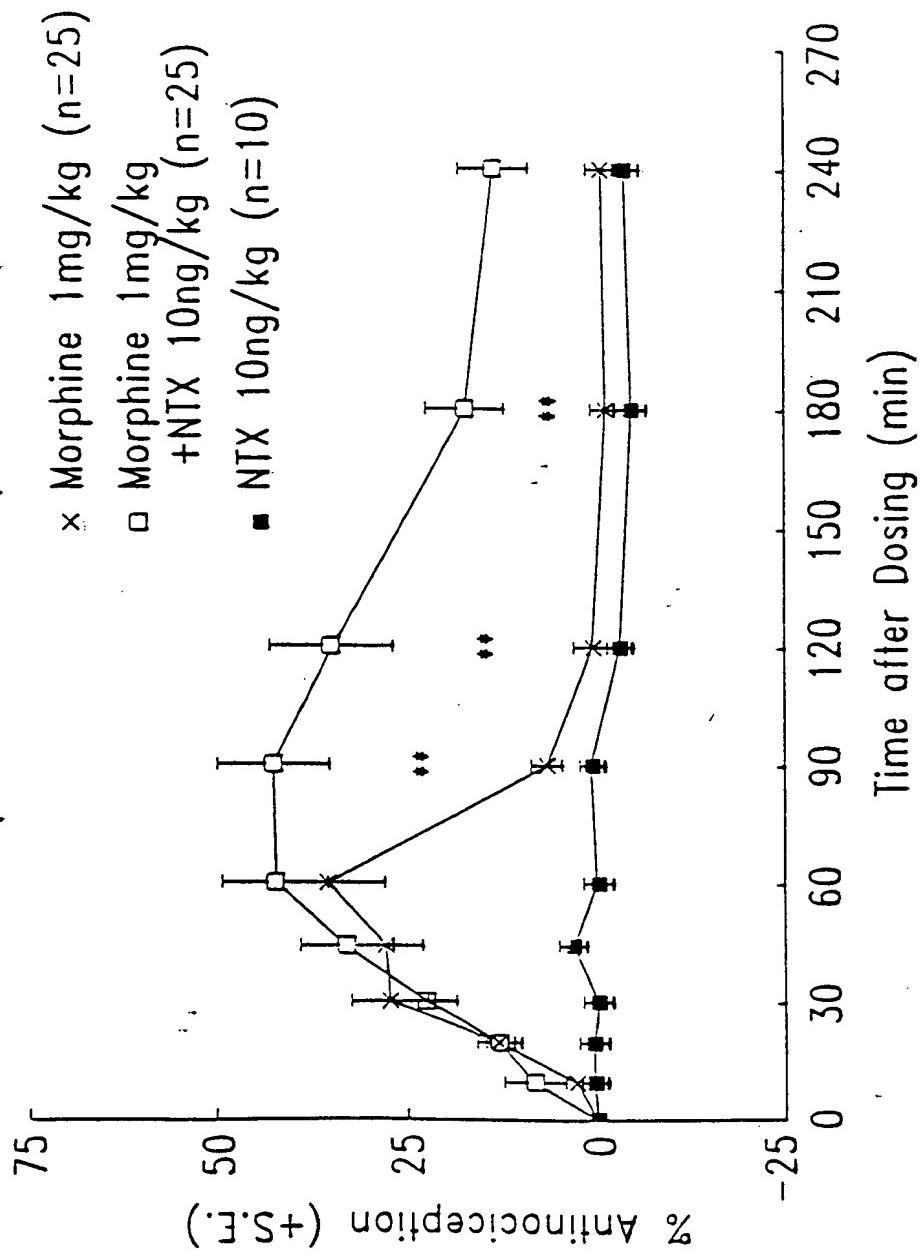


FIG. 7

APPROVED	O.G. FIG.
BY	
DRAFTSMAN	514 285
CLASS	SUBCLASS

Co-Treatment with Low-Dose Naltrexone Attenuates  
Acute and Chronic Morphine Dependence

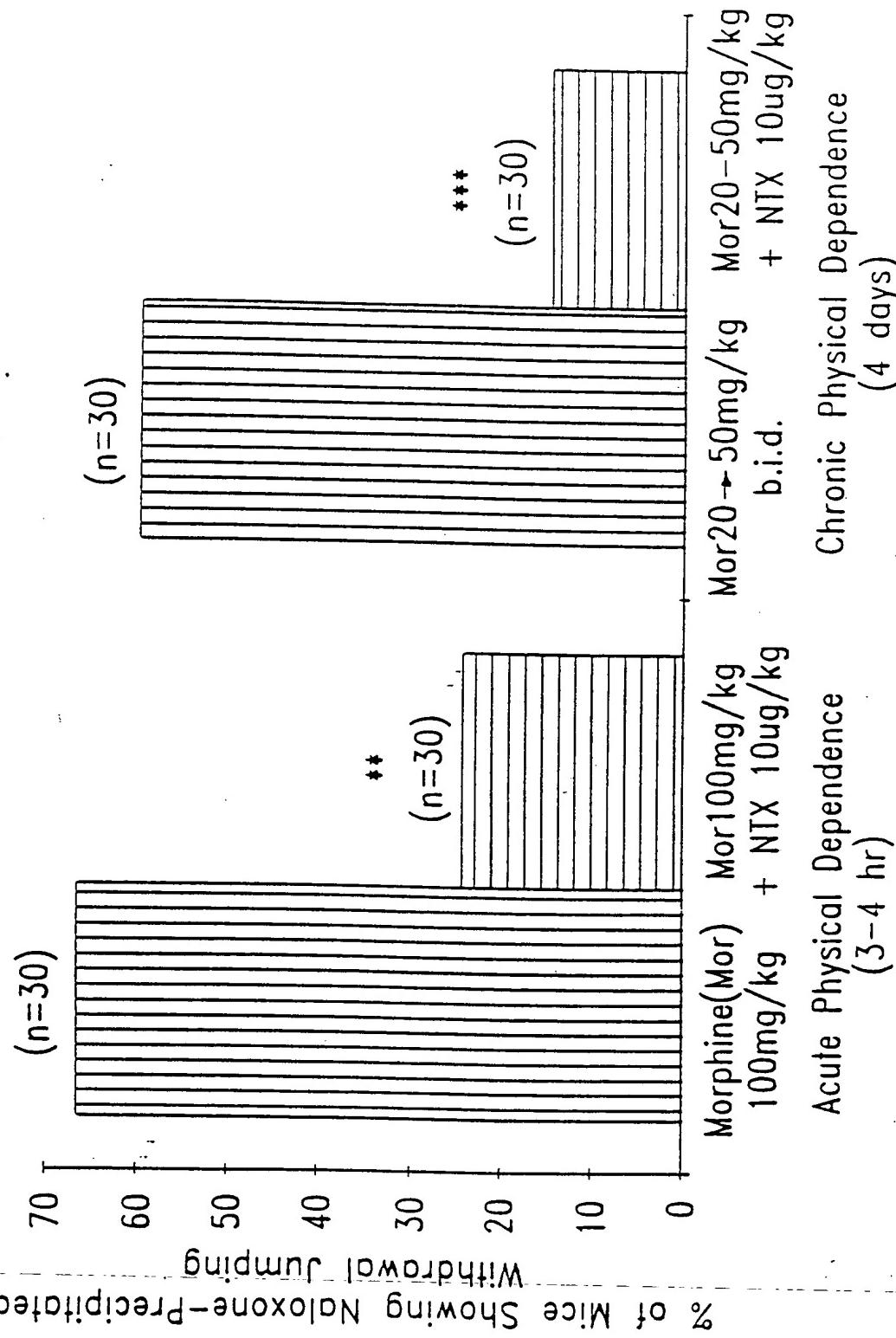


FIG. 8

APPROVED BY	O.G. FIG. —
DRAFTSMAN	574
	28.5

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Co-Treatment with Ultra-Low Dose Naloxone Enhances  
Morphine Antinociceptive Potency

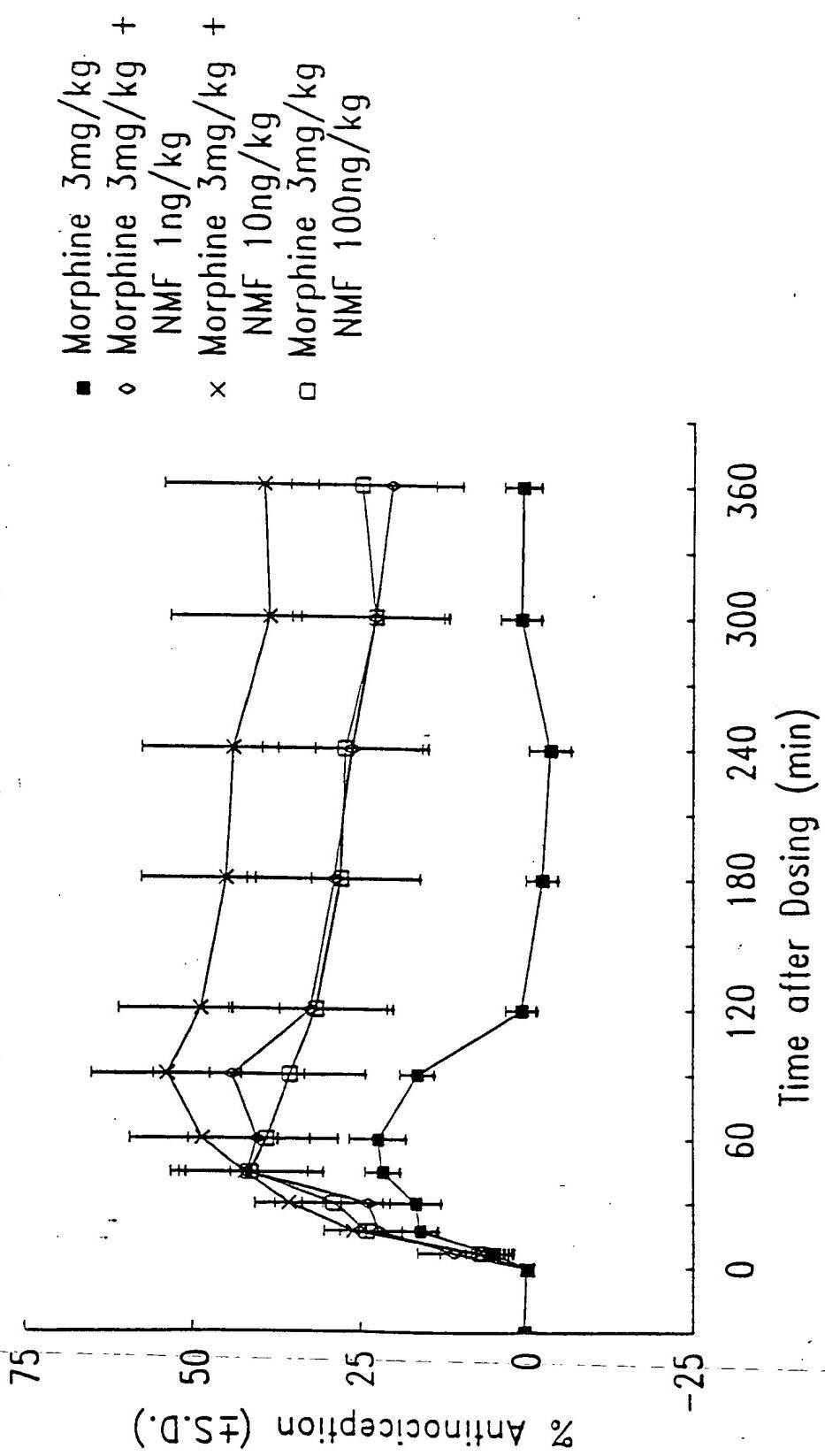


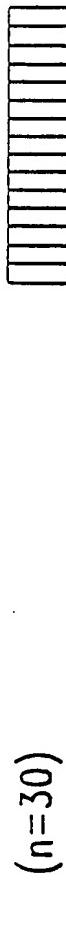
FIG. 9

APPROVED	O.G. FIG.	—
BY	CLASS	SUBCLASS
DRAFTSMAN	514285	

2000TF "T622.C03"

**Co-Treatment with Low-Dose Naltrexone or Nalmefene Attenuates Acute Morphine Dependence**

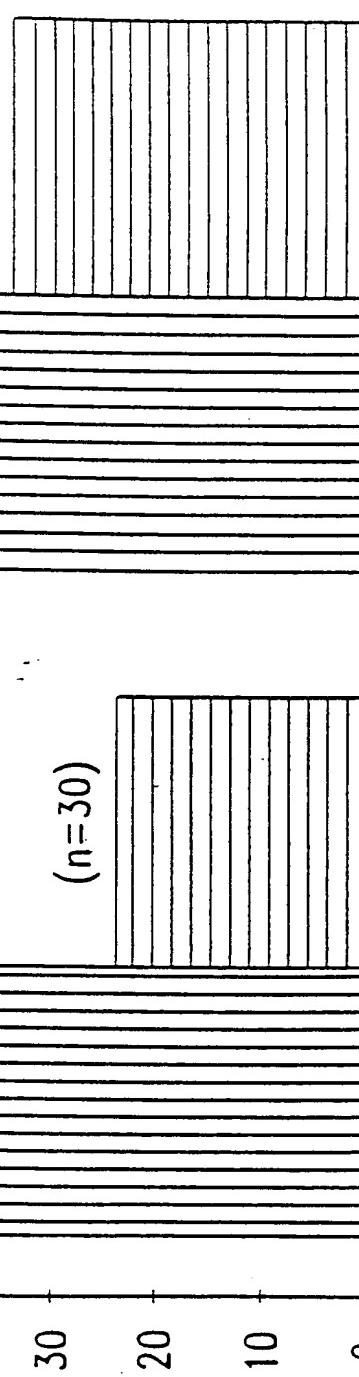
(n=30)



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(n=30)

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Mor 100mg/kg  
+ NTX 10ug/kg      Mor 100mg/kg  
+ NMF 1-10ug/kg

FIG. 10